DUCK CREEK

Golden Anniversary Renovation

Family Hang-ups and Hardwoods

'Tis the holiday season and time to get together with family. While it is your family, I think you'll admit no one person is the same. Everyone has his or her own characteristics, and at times, various tolerances for each other.

For example, let's say your Aunt Kathy can be quite critical and your Cousin Steve likes to get in heated political debates. These scenarios may not be your idea of family holiday fun. On the other hand, Aunt Kathy makes some delicious truffles and Cousin Steve is fun to watch football with. If you go into the holiday season thinking that everyone will act just like you, you may be sorely disappointed and have a long holiday. However, if you know going in what to expect, you can minimize problem situations and can make the most out of the holiday and enjoy your family.

Bottomland hardwood forests (BLH) are a lot like family. Certain species have different likes and dislikes. If you don't have the right expectations, you may be dissatisfied with the outcome. Knowing where certain species exist and what their tolerances are help biologists manage them better.

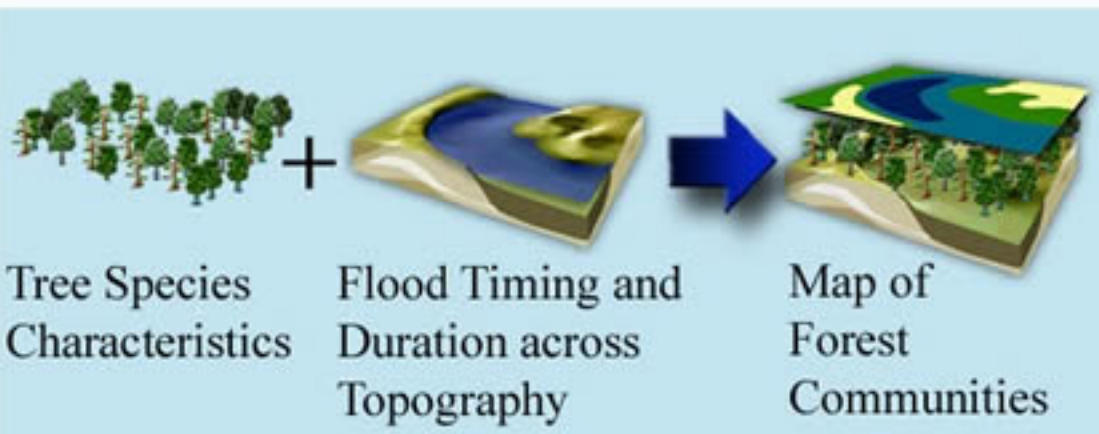

Figure 1. The distribution of tree species in bottomland hardwood forests are affected by flood timing and duration. Different species will occur at higher and lower elevations. Mapping the forest composition assist biologists with wetland management decisions.

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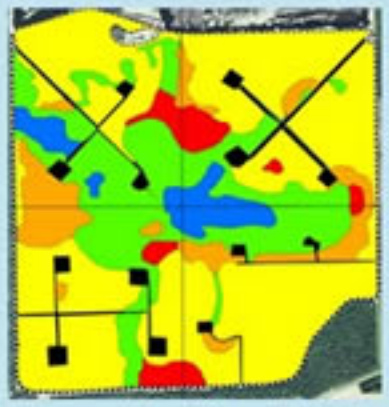

Pool 3, Forest Type Map
Yellow: Intermediate and High BLH
Orange: Mix of Intermediate and Low BLH and mortality zone
Red: Intermediate BLH mortality zone
Green: Overcup
Blue: Cypress and Overcup

Figure 2. The distribution of tree species in Pool 3 were mapped. These zones closely correspond to the pool's topography. This information has been helpful in dovetailing our timber and waterfowl management in the past few years.

Tupelo gum and bald cypress are the most flood tolerant and are classified as **Swamp** communities.

Overcup oak, red maple, and ash can tolerate low oxygen levels in the root zone. They have an early onset of senescence and are late to green-up in the spring. These characteristics lend them to be more flood tolerant and are the dominate species in **Low BLH** stands.

Less flood tolerant species such as pin and willow oaks are later to senesce and are less tolerant of low oxygen levels in the root zone. Root growth continues late in the fall until soil temperatures reach 38°F. These species are early to green-up in the spring. Their position on slightly higher ground, but not too high classifies them as **Intermediate BLH's**.

Hickories and Cherrybark oak have even more exaggerated flood intolerance than pin/willow oaks. These **High BLH's** are found at the highest elevations and are infrequently flooded.

At Duck Creek in the last 2 years we have mapped the different forest cover type zones, and matched them with elevations. This will help us target our various timber communities and match our flood regime accordingly. By matching water levels to forest type we can still provide early waterfowl hunting opportunity without hurting certain tree species. Over time this will improve the health and sustainability of the timber at Duck Creek.

Well, good luck this holiday season with family and out in the timber. Remember, reasonable expectations may keep you from barking up the wrong tree (pun intended) and help you have a better time.